

DAFTAR PUSTAKA

- [1] P. V. I. I. Joining, A. Processes, and F. O. F. Welding, “Fall 2004 PART VII JOINING & ASSEMBLY PROCESSES Two Types of Welding 2 . The Weld Joint 3 . Physics of Welding Kwon Fall 2004 Physics of Welding II Approximate Power Densities and Efficiency 4 . Features of Fusion Welded Joint 1 . Arc Welding (AW) AW wi,” pp. 1–7, 2004.
- [2] E. S. Adi Nugroho, “256395-Pengaruh-Variasi-Kuat-Arus-Pengelasan-Te-3Baae669,” *J. Rekayasa Sist. Ind.*, vol. 3, no. 2, pp. 134–142, 2018.
- [3] S. Sopiyan and F. B. Susetyo, “Pengaruh Besar Sudut Kampuh Terhadap Kekuatan Tarik Hasil Pengelasan Gmaw,” *J. Kaji. Tek. Mesin*, vol. 2, no. 2, pp. 99–105, 2018, doi: 10.52447/jktm.v2i2.971.
- [4] U. Zerbst, “Review on fracture and crack propagation in weldments - A fracture mechanics perspective,” *Eng. Fract. Mech.*, vol. 132, pp. 200–276, 2014, doi: 10.1016/j.engfracmech.2014.05.012.
- [5] L. Gesek Rotari Pada Kekuatan Sambungan Las Baja Karbon Rendah Nafsan upara, A. nugroho, and F. Teknik Jurusan Teknik Mesin Universitas Pancasila Jl Srungseng Sawah Jagakarsa -Jakarta Selatan, “Friction Welding Pengaruh Parameter Proses,” pp. 2–5, 2019.
- [6] M. Schwartz, “Friction stir welding,” *Innov. Mater. Manuf. Fabr. Environ. Saf.*, no. October, pp. 87–122, 2010, doi: 10.1201/b10386.
- [7] A. Zafar, M. Awang, and S. R. Khan, “Friction stir welding of polymers: An overview,” *Lect. Notes Mech. Eng.*, no. April, pp. 19–36, 2017, doi: 10.1007/978-981-10-4232-4_2.
- [8] H. Namazi, “Polymers in our daily life,” *BioImpacts*, vol. 7, no. 2, pp. 73–74, 2017, doi: 10.15171/bi.2017.09.
- [9] A. Paoletti, F. Lambiase, and A. Di Ilio, “Optimization of friction stir welding of thermoplastics,” *Procedia CIRP*, vol. 33, pp. 562–567, 2015, doi: 10.1016/j.procir.2015.06.078.
- [10] D. J. Brunelle, “Advances in Polycarbonates: An Overview,” pp. 1–5, 2005, doi: 10.1021/bk-2005-0898.ch001.
- [11] K. Myer, *Mechanical Engineers' Handbook, Materials and Engineering Mechanics*, vol. 44, no. 8. 2015.
- [12] M. Shazly, M. M. Z. Ahmed, and M. El-Raey, “Friction stir welding of polycarbonate sheets,” *TMS Annu. Meet.*, pp. 555–564, 2014, doi: 10.1002/9781118888056.ch65.
- [13] N. Kholis and H. Purwanto, “Analisis Hasil Double Side Friction Stir Welding pada Aluminium AA6061 dengan Penguat Serbuk Cu terhadap Struktur Mikro,” *Suara Tek. J. Ilm.*, vol. 14, no. 1, p. 01, 2023, doi: 10.29406/stek.v14i1.5325.
- [14] M. Syamsul and M. ’ Arif, “Teknologi Terkini Friction Stir Welding Untuk

- Aplikasi Di Dunia Penerbangan,” *Saintek II*, no. 2407–4845, pp. 1–13, 2017.
- [15] A. Setiawan, S. Irawan, A. Purnowidodo, J. Teknik, M. Politeknik, and N. Malang, “Pengaruh Temperatur Pelat Landasan Selama Proses Friction Stir Welding Terhadap Kekuatan Tarik Sambungan Las Lembaran HDPE,” *J. Rekayasa Mesin*, vol. 2, no. 3, pp. 232–240, 2011.
 - [16] Mulyanto and Sulardjaka, “Mechanical properties of friction stir welding joining of polytetrafluoroethylene,” *Int. Rev. Mech. Eng.*, vol. 14, no. 4, pp. 253–257, 2020, doi: 10.15866/ireme.v14i4.18037.
 - [17] S. A. Jalil, A. Husna, J. Teknik, M. Politeknik, and N. Lhokseumawe, “Pengaruh variasi arus pengelasan terhadap sifat mekanik pada proses pengelasan smaw,” vol. 15, pp. 36–41, 2017.
 - [18] Sugiarto, M. Nursasongko, M. Syamsul Ma, M. D. Hariz S, and R. Rossy, “Temperature behaviour advancing side and retreating side due to preheating in friction stir welding AL 6061,” pp. 650–657, 2023.
 - [19] D. Prasetyo Koesgi, Sehono, and D. Wicaksono, “Pengaruh Pemanasan Awal Terhadap Sifat Mekanik Sambungan Spot Friction Stir Welding Dalam Pemasangan Rivet Alumunium 2024,” *Tek. STTKD J. Tek. Elektron. Engine*, vol. 7, no. 1, pp. 140–153, 2021, doi: 10.56521/teknika.v7i1.315.
 - [20] H. Prabowo and B. Kusharjanta, “PENGARUH KECEPATAN PUTARAN TOOL DAN PEMANAS TAMBAHAN Keywords : Abstract ;,” vol. 12, no. September, pp. 34–38, 2013.
 - [21] Tarmizi, R. F. A. Wahid, and Irfan., “Pengaruh Kecepatan Pengelasan Terhadap Sifat Mekanik Sambungan Alumunium Paduan 5052-H32 Pada Proses Friction Stir Welding,” *Metalurgi*, vol. 34, no. 2019, pp. 9–18, 2019, [Online]. Available: <http://ejurnalmaterialmetalurgi.com/index.php/metalurgi/article/view/448>.
 - [22] B. Admadi H and I. W. Arnata, “Modul Kuliah 1: Teknologi Polimer,” *J. UNUD*, pp. 1–46, 2015.
 - [23] Q. L. Roesanto and F. Ciptandi, “Pengaplikasian Material Thermoplastic Rubber sebagai Produk Aksesoris Fesyen,” *J. ATRAT*, vol. 6, no. 3, pp. 254–260, 2018.
 - [24] C. S. Telaumbanua and F. Rahmadianto, “Analisa Kualitas Hasil Pembentukan Lembaran Polycarbonate terhadap Pengaruh Variasi Tekanan, Variasi Temperature, dan Variasi Waktu Pemanasan pada Proses Vacum Forming dengan Metode Taguchi,” *Pros. SENIATI*, vol. 6, no. 1, pp. 62–67, 2022, doi: 10.36040/seniati.v6i1.4879.
 - [25] S. A. Hafad, “Mechanical properties study of polycarbonate and other thermoplastic polymers,” *J. Phys. Conf. Ser.*, vol. 1973, no. 1, 2021, doi: 10.1088/1742-6596/1973/1/012001.
 - [26] N. Hasanah, “Pengaruh Wt % Polikarbonat Dan Proses Pembuatan Terhadap Sifat Fisik Dan Mekanik Polypropylene / Polycarbonate Blend Sebagai

Material Sabot,” p. 98, 2016.

- [27] R. Denti Salindeho, J. Soukota, and R. Poeng, “Pemodelan Pengujian Tarik Untuk Menganalisis Sifat Mekanik Material,” *Poros J. Tek. Mesin Unsrat*, vol. 2, no. 2, pp. 1–11, 2013.
- [28] N. Saba, M. Jawaid, and M. T. H. Sultan, *An overview of mechanical and physical testing of composite materials*. Elsevier Ltd, 2018.
- [29] M. Kuroso and M. Khumaidi Usman, “Analisis Microstruktur Dan Sifat Kekerasan Pada Pengelasan Smaw Dengan Arus 90 Ampere Pada Bracket Bawah Carlift Two Post,” *J. Politek. Harapan Bersama*, 2020.
- [30] D. Koga, S. Kusumi, M. Shibata, and T. Watanabe, “Applications of Scanning Electron Microscopy Using Secondary and Backscattered Electron Signals in Neural Structure,” *Front. Neuroanat.*, vol. 15, no. December, pp. 1–17, 2021, doi: 10.3389/fnana.2021.759804.
- [31] S. O. Wijayanto and A.P Bayuseno, “Analisis Kegagalan Material Pipa Ferrule Nickel Alloy N06025 Pada Waste Heat Boiler Akibat Suhu Tinggi Berdasarkan Pengujian : Mikrografi Dan Kekerasan,” *J. Tek. Mesin Undip*, vol. 1, no. 4, pp. 33–39, 2013.
- [32] O. P. Choudhary and P. ka, “Scanning Electron Microscope: Advantages and Disadvantages in Imaging Components,” *Int. J. Curr. Microbiol. Appl. Sci.*, vol. 6, no. 5, pp. 1877–1882, 2017, doi: 10.20546/ijcmas.2017.605.207.
- [33] M. K. Bilici, “Investigation of the effects of welding variables on the welding defects of the friction stir welded high density polyethylene sheets,” *J. Elastomers Plast.*, vol. 54, no. 3, pp. 457–476, 2022, doi: 10.1177/00952443211058845.
- [34] T. Tarmizi, F. O. Wijaya, and I. Irfan, “Pengaruh Variasi Diameter Tool Pin Pada Friction Stir Welding Terhadap Sifat Mekanik Dan Struktur Mikro Sambungan Aluminium 6061-T6,” *Kapal J. Ilmu Pengetah. dan Teknol. Kelaut.*, vol. 16, no. 3, pp. 91–99, 2019, doi: 10.14710/kapal.v16i3.23280.
- [35] P. Heru Sudargo, B. Margono, E. Suryono, and I. Ardiyanto Arsita, “Pengaruh Feedrate Terhadap Pengujian Uji Tarik Dan Struktur Mikro Sambungan Sejenis Aluminium 7075 Dengan Metode Friction Stir Welding,” *Teknika*, vol. 7, no. 1, pp. 1–6, 2021, doi: 10.52561/teknika.v7i1.115.
- [36] Y. Guo and P. Li, “Effect of Residual Stress and Microstructure on the Fatigue Crack Growth Behavior of Aluminum Friction Stir Welded Joints,” *Materials (Basel)*., vol. 17, no. 2, 2024, doi: 10.3390/ma17020385.
- [37] F. Lambiase, V. Grossi, and A. Paoletti, “Advanced mechanical characterization of friction stir welds made on polycarbonate,” *Int. J. Adv. Manuf. Technol.*, vol. 104, no. 5–8, pp. 2089–2102, 2019, doi: 10.1007/s00170-019-04006-4.
- [38] F. Nugroho, N. Ahmadi, and S. Hidayat, “Pengaruh Kecepatan Feedrate

Friction Stir Welding (Fsw) Terhadap Sifat Mekanik Dan Struktur Mikro Pada Aluminium Paduan Aa 2024-T3,” *Vortex*, vol. 3, no. 2, p. 116, 2022, doi: 10.28989/vortex.v3i2.1265.

- [39] P. Pujono, D. Prabowo, I. Kurniawan, J. S. Pribadi, and M. Yusuf, “Laju perambatan retak fatik dan sifat mekanik pada pengelasan friction stir welding (FSW) aluminium AA2024-T3 dengan perlakuan transient thermal tensioning (TTT),” *Turbo J. Progr. Stud. Tek. Mesin*, vol. 11, no. 2, pp. 293–300, 2022, doi: 10.24127/trb.v11i2.2270.
- [40] S. K. Sahu, K. Pal, and S. Das, “Parametric study on joint quality in friction stir welding of polycarbonate,” *Mater. Today Proc.*, vol. 39, no. xxxx, pp. 1275–1280, 2020, doi: 10.1016/j.matpr.2020.04.218.
- [41] Mulyadi, R. Firdaus, and R. S. Untari, “Optimization of Friction Stir Welding Parameters for AA6061-T651 Aluminum Alloy: Defect Analysis and Process Improvement,” *Acad. Open*, vol. 8, no. 1, pp. 1–13, 2023, doi: 10.21070/acopen.8.2023.6665.
- [42] A. Ghiasvand, S. M. Noori, W. Suksatan, J. Tomkow, S. Memon, and H. A. Derazkola, “Effect of Tool Positioning Factors on the Strength of Dissimilar Friction Stir Welded Joints of AA7075-T6 and AA6061-T6,” *Materials (Basel)*, vol. 15, no. 7, 2022, doi: 10.3390/ma15072463.
- [43] C. Sutowo and B. Priyono, “Analisa Kegagalan Pada Poros Baja Karbon S45C Aplikasi Komponen As Sink Roll,” *Anal. Kegagalan Pada Poros Baja Karbon S45C*, vol. TM-023, no. November, pp. 1–5, 2014.